EXHIBIT C

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC *Plaintiff*, v. SAMSUNG ELECTRONIC CO., LTD and SAMSUNG ELECTRONICS AMERICA, INC., *Defendants*.	Case No. 2:22-CV-00422-JRG-RSP **JURY TRIAL DEMANDED**

**DEFENDANTS' SUPPLEMENTAL OBJECTIONS AND RESPONSES
TO HEADWATER RESEARCH LLC'S FIRST SET OF INTERROGATORIES
(NO. 1)[1]**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, Samsung Electronics America, Inc. ("SEA") and Samsung Electronics Co., LTD. ("SEC") (collectively "Samsung") hereby supplements its Objections and Responses to Headwater Research LLC's ("Headwater") First Set of Interrogatories ("Interrogatories"). The supplemental responses and objections are made in accordance with the Federal Rules of Civil Procedure and are based upon information presently available to "Samsung. These responses and objections are without prejudice to "Samsung's right to use or rely on subsequently discovered information.

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[1] Headwater's Interrogatory No. 1 counts as at least six (6) separate interrogatories, pursuant to Fed. R. Civ. P. 33, which amounts to it having served twenty-two (22) separate interrogatories.

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SECOND SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 1 (JUNE 30, 2023):

Samsung hereby restates and incorporates its General Objections and the specific objections set forth above. Subject to all Samsung's objections, Samsung further responds to this Interrogatory as follows:

(2)   Invalidity

Samsung incorporates its Invalidity Contentions, pursuant to P. R. 3-3 (served May 9, 2023), including any amendments or supplements thereto.

Samsung continues to diligently pursue third party discovery and supplement based on the same. As such, Samsung hereby identifies the following productions from third parties relating to, among other things, various systems that pre-date the Asserted Patents' alleged inventions:

CTXS 000001 - CTXS 000014; CTXS 000015 - CTXS 000015; CTXS 000016 - CTXS 000137; CTXS 000138 - CTXS 000146; CTXS 000147 - CTXS 000155; CTXS 000156; NOK000001 - NOK000016; NOK000017 - NOK000045; NOK000046; HDWTR-GOOG00001; HDWTR-GOOG00002; HDWTR-GOOG00003; HDWTR-GOOG00004; HDWTR-GOOG00005; HDWTR-GOOG00006; HDWTR-GOOG00007; HDWTR-GOOG00008; HDWTR-GOOG00009; HDWTR-GOOG00010; HDWTR-GOOG00011; HDWTR-GOOG00012; and HDWTR-GOOG00013.

Discovery in this case has commenced and Samsung's investigation is on-going. Samsung reserves the right to modify or supplement its responses as more information is discovered.

THIRD SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 1 (AUGUST 1, 2023)

Samsung hereby restates and incorporates its General Objections and the specific objections set forth above. Subject to all Samsung's objections, Samsung further responds to this Interrogatory as follows:

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(2)   <u>Invalidity</u>

Samsung incorporates its Invalidity Contentions, pursuant to P. R. 3-3 (served May 9, 2023), including any amendments or supplements thereto.

Samsung continues to diligently pursue third party discovery and supplement based on the same. As such, Samsung hereby identifies the following production from Google relating to operating systems (e.g., Android) that pre-date the Asserted Patents' alleged inventions and the following production from Samsung necessitated by the same:

GOOG-HEADWATER-00000001-6; GOOG-HEADWATER-00000007-13; GOOG-HEADWATER-00000014-16; GOOG-HEADWATER-00000017-20; GOOG-HEADWATER-00000021-24; GOOG-HEADWATER-00000025-28; GOOG-HEADWATER-00000029-34; GOOG-HEADWATER-00000035-39; GOOG-HEADWATER-00000040-42; GOOG-HEADWATER-00000043-59; GOOG-HEADWATER-00000060-91; GOOG-HEADWATER-00000092-123; SAMSUNG_PRIORART0005174-76; SAMSUNG_PRIORART0005177-317; SAMSUNG_PRIORART0005042; SAMSUNG_PRIORART0005062; SAMSUNG_PRIORART0005350; SAMSUNG_PRIORART0005351; SAMSUNG_PRIORART0005352; SAMSUNG_PRIORART0005353; SAMSUNG_PRIORART0005354; SAMSUNG_PRIORART0005355; SAMSUNG_PRIORART0005356; SAMSUNG_PRIORART0005357; SAMSUNG_PRIORART0005358; SAMSUNG_PRIORART0005359; SAMSUNG_PRIORART0005360; SAMSUNG_PRIORART0005361; SAMSUNG_PRIORART0005362; SAMSUNG_PRIORART0005363; SAMSUNG_PRIORART0005364; SAMSUNG_PRIORART0005046; SAMSUNG_PRIORART0005043; SAMSUNG_PRIORART0005044;

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SAMSUNG_PRIORART0005045; SAMSUNG_PRIORART0005054;

SAMSUNG_PRIORART0005055; SAMSUNG_PRIORART0005056;

SAMSUNG_PRIORART0005057; SAMSUNG_PRIORART0005058;

SAMSUNG_PRIORART0005059; SAMSUNG_PRIORART0005060;

SAMSUNG_PRIORART0005061; SAMSUNG_PRIORART0005318;

SAMSUNG_PRIORART0005398; SAMSUNG_PRIORART0005047-53;

SAMSUNG_PRIORART0005063-65; SAMSUNG_PRIORART0005066-74;

SAMSUNG_PRIORART0005075-135; SAMSUNG_PRIORART0005136-52;

SAMSUNG_PRIORART0005153-70; SAMSUNG_PRIORART0005171-73;

SAMSUNG_PRIORART0005319-49; SAMSUNG_PRIORART0005365-74;

SAMSUNG_PRIORART0005375-83; SAMSUNG_PRIORART0005384-94;

SAMSUNG_PRIORART0005395-97.

These third party documents make clear that even the earliest Android OS versions (e.g., versions 1.0-2.2) satisfy many, if not all, of the asserted claim limitations as applied by Headwater in its infringement contentions. *See, e.g.,* GOOG-HEADWATER-000000040 ("ConnectivityManager"), *id.* ("Monitor network connections (Wi-Fi, GPRS, UMTS, etc.)"), GOOG-HEADWATER-000000041 ("getNetworkInfo"), *id.* ("TYPE_MOBILE = 0" and "TYPE_WIFI = 1"); GOOG-HEADWATER-000000042 ("Ensure that a network route exists to deliver traffic to the specified host via the specified network interface. An attempt to add a route that already exists is ignored, but treated as successful."); GOOG-HEADWATER-000000035 ("This class gives you control of the power state of the device."); GOOG-HEADWATER-000000001 ("You can use methods on this object to control the power state of the device."); GOOG-HEADWATER-000000097 (noting that "[w]aking up in the background when the phone

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would otherwise be sleeping" "costs the most" battery life); GOOG-HEADWATER-000000101

("Only update if WiFi or 3G is connected and not roaming"); GOOG-HEADWATER-000000106-

11 ("Foreground apps"); GOOG-HEADWATER-000000112-18 ("Background apps"); GOOG-

HEADWATER-000000118 ("Background apps . . . Checking current battery and network state

before running a full update"), GOOG-HEADWATER-000000026 ("When the user leaves an

application, its process is kept around in the background allowing it to continue working . . . if

needed, and come immediately to the foreground if the user returns to it."), *id.* ("A Service allows

an application to implement longer-running background operations."), *id.* ("The e-mail application

schedules an alarm to wake up a service at regular intervals that looks for and retrieves any new

mail."); GOOG-HEADWATER-000000032 ("@return Whether background data usage is allowed

. . . getBackgroundDataSetting . . . Whether an application should use data while it is in the

background."); GOOG-HEADWATER-000000033 ("Sets the persisted value for

enabling/disabling Mobile data. . . Whether the mobile data connection should be used or not.");

GOOG-HEADWATER-000000029-34 ("If an application uses the network in the background, it

should listen for this broadcast and stop using the background data if the value is false. . . If false,

applications should not use the network if the application is not in the foreground.");

SAMSUNG_PRIORART0005048 ("Monitor network connections (Wi-Fi, GPRS, UMTS, et.c)");

SAMSUNG_PRIORART0005049 ("The setting for background data usage has changed values

. . . If an application uses the network in the background, it should listen for this broadcast and

stop using the background data if the value is false."); SAMSUNG_PRIORART0005049

("networkType == TYPE_WIFI || networkType == TYPE_MOBILE");

SAMSUNG_PRIORART0005049 ("TYPE_MOBILE = 0" and "TYPE_WIFI = 1");

SAMSUNG_PRIORART0005050-51 ("Ensure that a network route exists to deliver traffic to the

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specified host via the specified network interface."); SAMSUNG_PRIORART0005051 ("Returns the value of the setting for background data usage. If false, applications should not use the network if the application is not in the foreground. Developers should respect this setting, and check the value of this before performing any background data operations."); SAMSUNG_PRIORART0005051 ("Whether background data usage is allowed . . . Sets the value of the setting for background data usage . . . Whether an application should use data while it is in the background . . . allowBackgroundData").

Discovery in this case has commenced and Samsung's investigation is on-going. Samsung reserves the right to modify or supplement its responses as more information is discovered.

FOURTH SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 1 (AUGUST 8, 2023)

Samsung incorporates its Invalidity Contentions, pursuant to P. R. 3-3 (served May 9, 2023), including any amendments or supplements thereto.

Samsung continues to diligently pursue third party discovery and supplement based on the same. In light of a recent production by Google, Samsung was able to identify additional relevant information relating to devices and operating systems (e.g., Android) that pre-date the Asserted Patents' alleged inventions. For example, Google's production dated July 31, 2023 included printouts of source code files from certain Android GitHub repositories. Using information included therein (e.g., the source code trees), Samsung was able to locate additional relevant code for at least Android versions 1.0-2.2, and thereafter further locate information pertaining to devices utilizing such code. Accordingly, Samsung identifies the following:

SAMSUNG_PRIORART0005420-23; SAMSUNG_PRIORART0005424-28; SAMSUNG_PRIORART0005429-44; SAMSUNG_PRIORART0005445-48; SAMSUNG_PRIORART0005449-52; SAMSUNG_PRIORART0005453-57;

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SAMSUNG_PRIORART0005458-71; SAMSUNG_PRIORART0005472-77;

SAMSUNG_PRIORART0005478-84; SAMSUNG_PRIORART0005485-86;

SAMSUNG_PRIORART0005487; SAMSUNG_PRIORART0005488-89;

SAMSUNG_PRIORART0005490-93; SAMSUNG_PRIORART0005494-581;

SAMSUNG_PRIORART0005582-620; SAMSUNG_PRIORART0005621-22;

SAMSUNG_PRIORART0005623-24.

Such information includes, but is not limited to, the Samsung GT-I7500 and a physical HTC Dream / T-Mobile G1 smartphone running Android OS version 1.6 that is available for inspection in Fish & Richardson's Washington, D.C. office.

Discovery in this case has commenced and Samsung's investigation is on-going. Samsung reserves the right to modify or supplement its responses as more information is discovered.

INTERROGATORY NO. 2:

Describe in detail your awareness of the Asserted Patents, including when you first became aware of the Asserted Patents and any actions you have taken as a result of your awareness of the Asserted Patents.

RESPONSE TO INTERROGATORY NO. 2:

In addition to and without limiting the foregoing General Objections, which are incorporated by reference as though fully set forth herein, Samsung objects to this request as overly broad, unduly burdensome, and seeking the disclosure of information that is not relevant to this action or that is not relevant to any claim or defense of any party nor proportional to the needs of the case. Samsung objects to this request as vague and ambiguous at least as to the phrases "awareness" and "actions you have taken as a result of your awareness." Samsung objects to this request to the extent it seeks information protected by the attorney-client privilege, joint defense privilege, common interest privilege, or by the work product doctrine, prepared in connection with